

TCP/IP REFERENCE MODEL

18→ APPLICATION LAYER	TELNET, FTP, SMTP, DNS
16→ TRANSPORT LAYER	TCP, UDP
14→ NETWORK LAYER	IP
12→ DATA LINK LAYER	ETHERNET, TOKEN RING, DQDB
10→ PHYSICAL LAYER	FIBER OPTICS, COAXIAL CABLE

FIG. 1
(PRIOR ART)

IP PACKET (DATAGRAM)

0	4	8	16	19	24	31
VERS	HLEN	TYPE SERVICE	TOTAL LENGTH			
IDENTIFICATION			FLAGS	FRAGMENT OFFSET		
TIME TO LIVE		PROTOCOL	HEADER CHECKSUM			
SOURCE IP ADDRESS						
DESTINATION IP ADDRESS						
IP OPTIONS (IF ANY)					PADDING	
DATA						
.....						

FIG. 3
(PRIOR ART)

FIG. 3

TCP SEGMENT

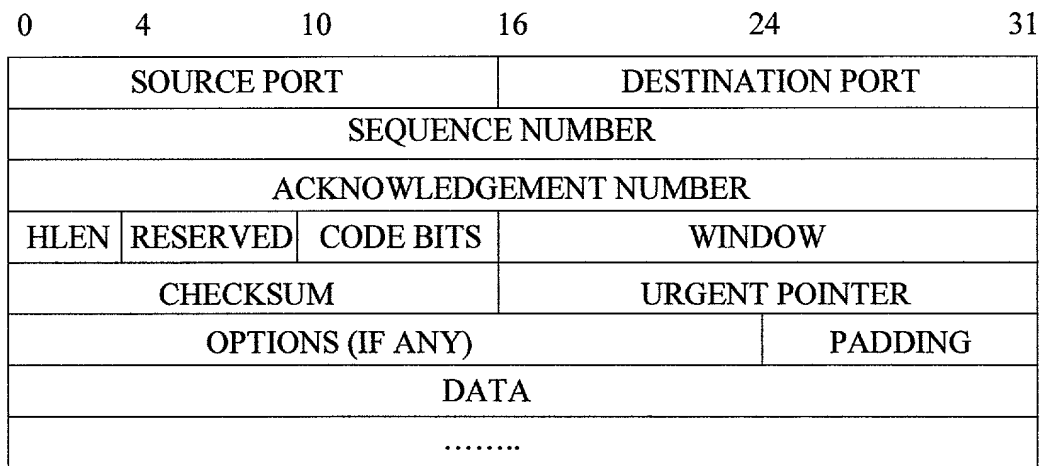


FIG. 4
(PRIOR ART)

FIG. 4 (PRIOR ART)

NETWORK ARCHITECTURE

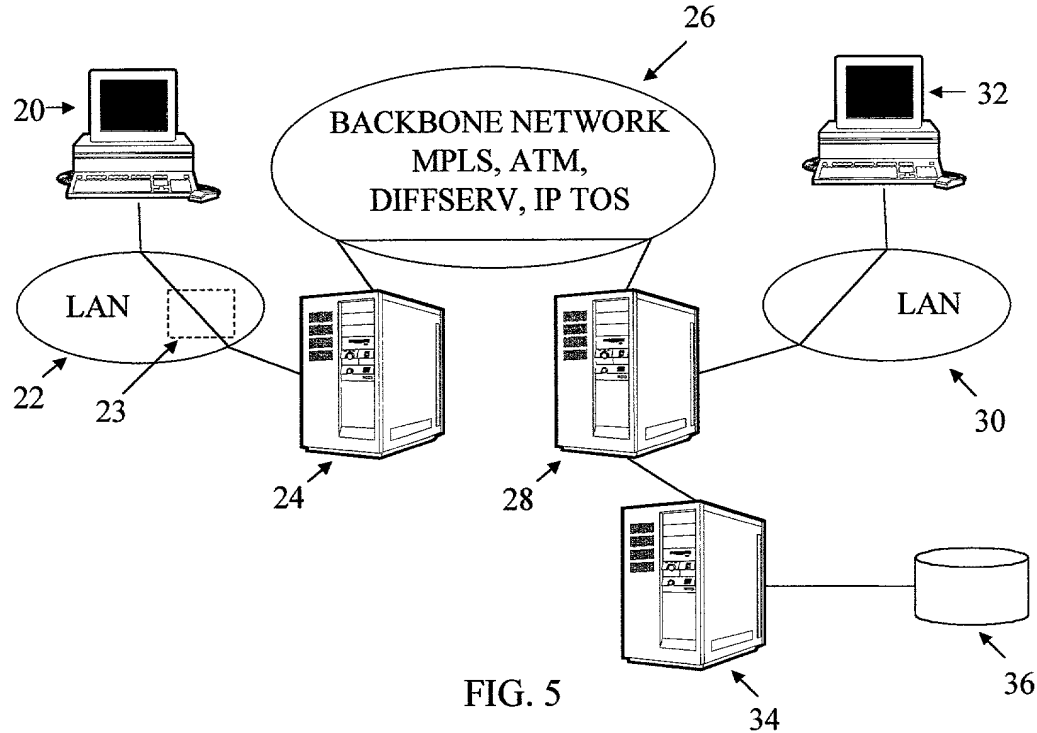


FIG. 5

TYPICAL EDGE ROUTER

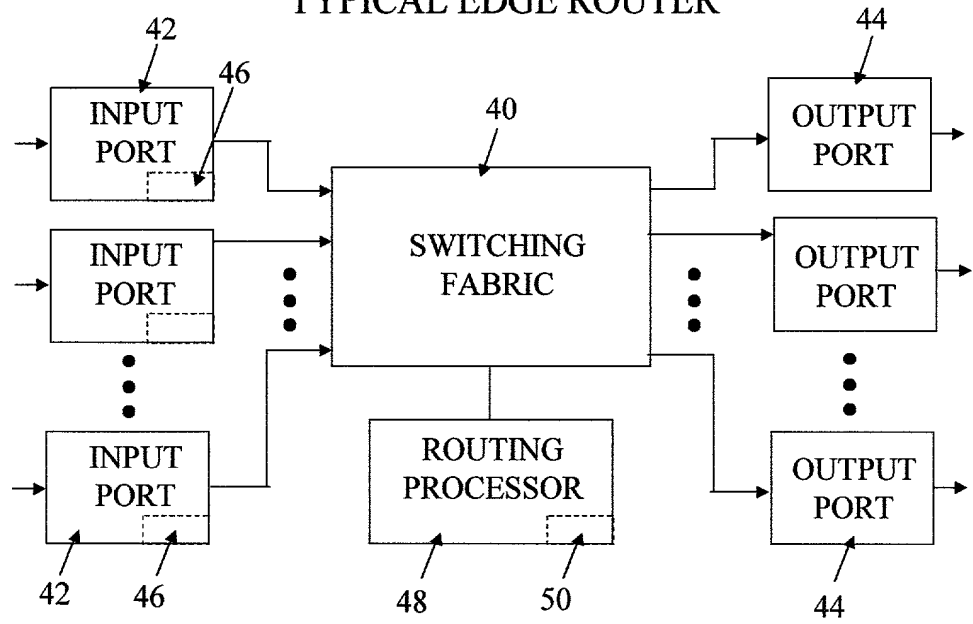


FIG. 6

FIG. 6

CLASSIFICATION FUNCTIONALITY

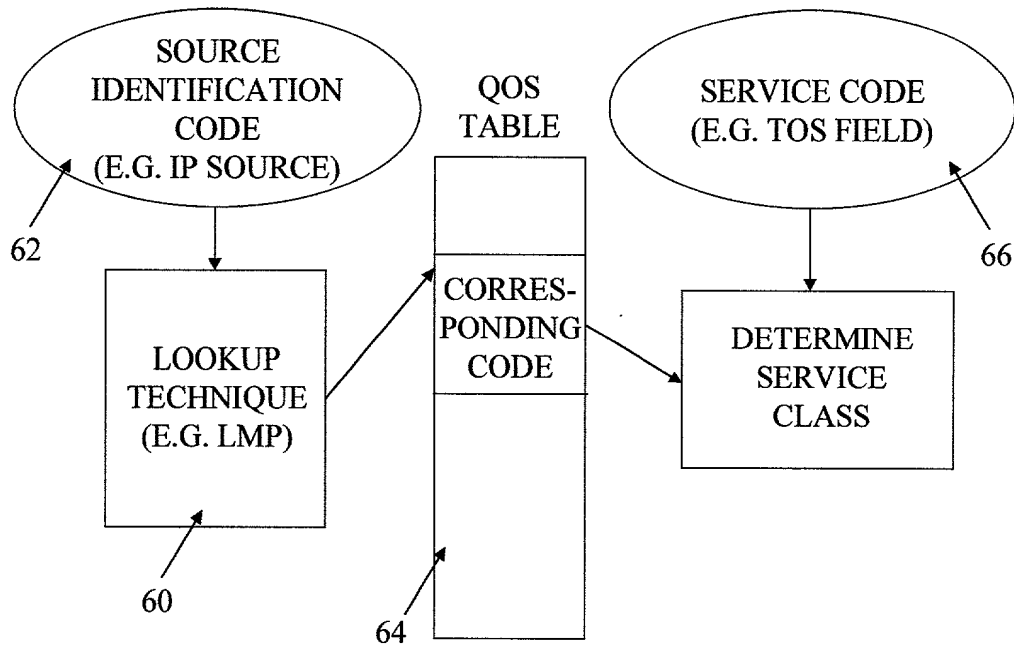


FIG. 7